

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A water temperature sensor comprising:
a temperature measuring part for measuring a temperature of water;
a water gauge chamber extending along an outer side of an outer edge of
an outer tub of a washing machine; and
a hollow chamber cap located at a bottom edge of the water gauge
chamber, an entire surface of the hollow chamber cap exposed to the water in
the water gauge chamber defining an upper surface of the hollow chamber
cap having a flat, disc shaped upper side, the temperature measuring part
being mounted in a seating portion of the hollow chamber cap, the temperature
measuring part being below the entire upper surface of the hollow chamber
cap, wherein neither the water gauge chamber nor the hollow chamber cap
project below a bottom side of the outer tub.

2. (Previously Presented) The water temperature sensor of claim 1,
further comprising a heat insulating material inserted into a hollow space of
the hollow chamber cap to achieve an adiabatic effect and to fasten said
temperature measuring part within said chamber cap.

3. (Currently Amended) A water temperature sensor comprising:

a temperature measuring part including a temperature detecting sensor for measuring the temperature of water, and signal lines for connecting the temperature detecting sensor with a circuit requiring the measured value; and

a hollow chamber cap fitting into and thereby closing an opened bottom portion of a water gauge chamber, a hollow space of the hollow chamber cap facing downward, an entire surface of the hollow chamber cap having a flat, disc-shaped upper side, wherein an entire upper surface of the flat, disc-shaped upper side of the hollow cap is exposed to the water in the water gauge chamber defining an upper surface of the hollow chamber cap, the entire upper surface being a flat, disc-shaped surface,

wherein the temperature measuring part is disposed in a seating portion of the hollow chamber cap, so that the water temperature is measured without the temperature measuring part directly contacting with the water.

4. (Previously Presented) The water temperature sensor of claim 3, further comprising a heat insulating material inserted into the hollow space of the hollow chamber cap to achieve an adiabatic effect and to fasten said temperature measuring part within said chamber cap.

5. (Currently Amended) A water temperature sensor comprising:

a temperature measuring part including a temperature detecting sensor for measuring the temperature of water, signal lines for connecting the temperature detecting sensor with a circuit requiring the measured value, and a cylindrical probe containing the temperature detecting sensor and the signal lines;

~~an outer tub of a washing machine having a bottom that is substantially flat, a side that is substantially cylindrical in shape, and a truncated conical-shaped portion between the bottom and the side;~~

a water gauge chamber extending along ~~a portion of an outer surface of the cylindrical-shaped side and the truncated conical-shaped portion of the outer tub~~ an outer side of an outer edge of an outer tub of a washing machine;
and

a hollow chamber cap located on a bottom edge of the water gauge chamber ~~in a position such that an upper surface of the hollow chamber cap makes no contact with the cylindrical side or the truncated conical-shaped portion of the outer tub,~~

wherein a ~~the~~ cylindrical probe of the temperature measuring part extends upward from within the hollow chamber cap through a hole at ~~a center~~ an upper surface of the hollow chamber cap, thereby the cylindrical probe of

the temperature measuring part directly contacting a washing water in the water gauge chamber after penetrating the hole.

6. (Previously Presented) The water temperature sensor of claim 5, further comprising a heat insulating material inserted into a hollow space of the hollow chamber cap to achieve an adiabatic effect and to fasten said temperature measuring part within said chamber cap.

7. (Canceled)

8. (Previously Presented) The water temperature sensor of claim 1, wherein the hollow chamber cap is welded to the bottom edge of the water gauge chamber.

9. (Currently Amended) The water temperature sensor of claim 1, wherein the outer tub is formed with a cylindrical upper portion and a truncated conical-shaped lower portion the truncated conical-shaped portion being tapered inwardly toward a bottom of the outer tub, and the hollow chamber cap is separated from ~~a lower edge of the cylindrical upper portion~~ by a vertical length of the truncated conical-shaped portion tapered inwardly.

10. (Previously Presented) The water temperature sensor of claim 1,
wherein the hollow chamber cap is formed of plastic.

11. (New) The water temperature sensor of claim 5, wherein the hole is at
a center of the upper surface of the hollow chamber cap.